

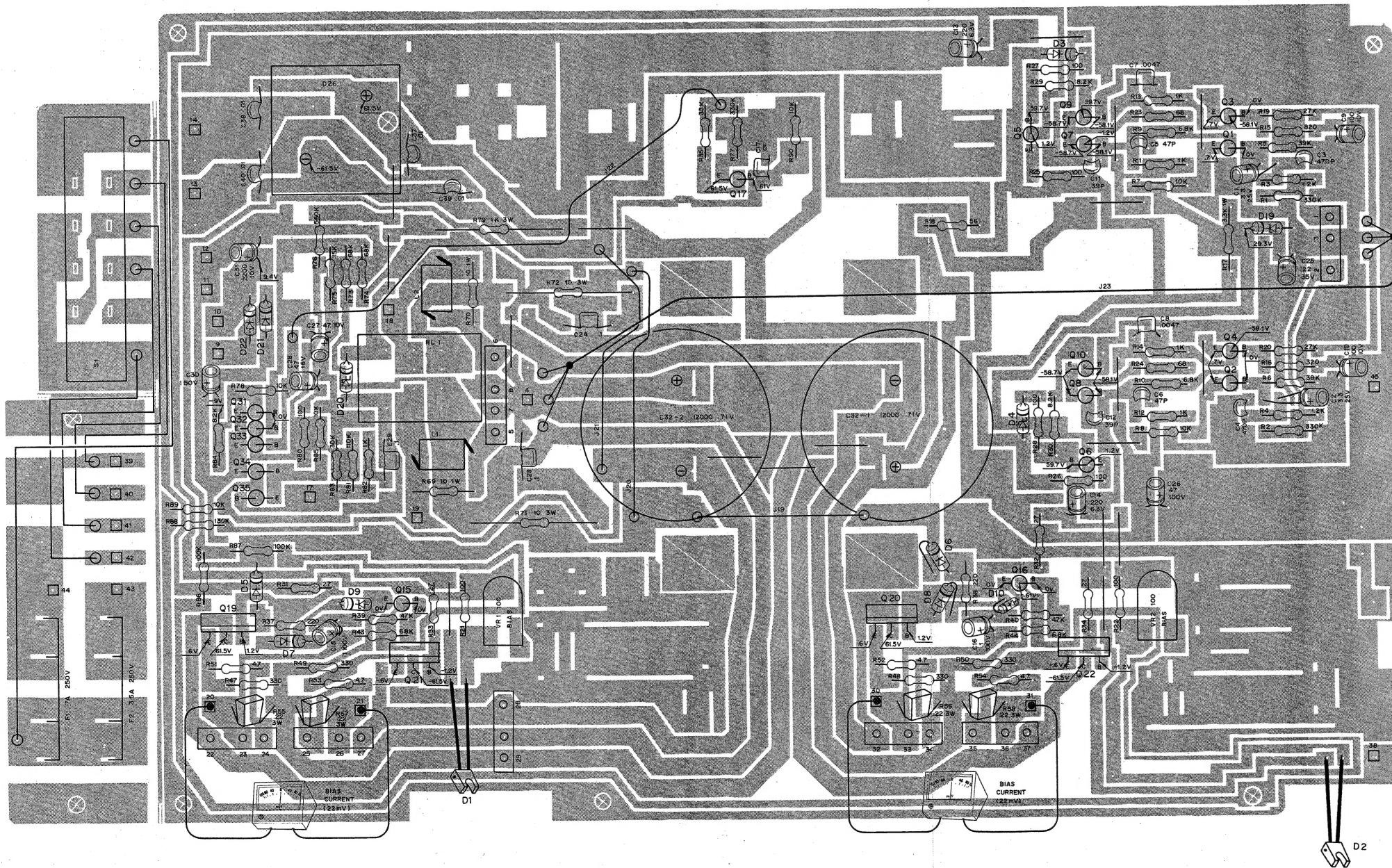
# MODEL ELEVEN GX (KR-11000GX)

Model ELEVEN GX circuit only is modified power amplifier from Model ELEVEN G.  
This Service Manual documents a whole schematic, spec. PCB illustration and parts list.  
As for adjustment procedure, disassembly and other items, refer to the Model ELEVEN G Service Manual.

## PC BOARD

POWER AMP (X07-1760-80)

COMPONENT SIDE VIEW



## PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考	Ref. No. 参照番号	Par 部品
<b>TOTAL</b>					
-	A20-1475-02	FRONT PANEL (11GX)	*	-	H20-0
-	A20-1476-02	FRONT PANEL (11000GX)	*	-	J02-C
-	A30-0148-03	DIAL BACK BOARD	*	-	J12-C
-	A33-0051-01	REFLECTOR	*	-	J19-C
-	A50-0069-03	SIDE PLATE (L)	*	-	J19-C
-	A50-0070-03	SIDE PLATE (R)	*	-	J41-C
-	A54-0175-12	WOOD FRONT AND TOP BOAR	*	-	J41-C
-	B01-0120-03	PANEL ESCUTCHEON	*	-	K23-C
-	B01-0121-04	PANEL ESCUTCHEON SIDE	*	-	K23-C
-	B01-0122-04	PANEL ESCUTCHEON SIDE	*	-	K23-C
-	B04-0069-03	MESH PLATE	*	-	K23-C
-	B07-0230-14	ESCUTCHEON (SHAFT)	*	-	K23-C
-	B07-0234-03	ESCUTCHEON (LEVER)	*	-	K27-C
-	B07-0235-04	ESCUTCHEON (POWER)	*	-	K27-C
-	B07-0243-04	ESCUTCHEON (PUSH SW)	*	-	K29-C
-	B07-0244-03	ESCUTCHEON (PUSH SW)	*	-	K29-C
-	B07-0245-03	ESCUTCHEON (PUSH SW)	*	-	K29-C
-	B08-0005-04	INDICATOR	*	-	L01-1
-	B08-2017-14	INDICATOR	*	-	N08-C
-	B08-3016-04	INDICATOR	*	-	N08-C
-	B10-0238-03	FRONT GLASS	*	-	S1
-	B20-0422-03	DIAL CALIBRATIONS	*	S2	S59-1
-	B21-0023-14	DIAL POINTER	*	-	S33-4
-	B30-0077-05	LAMP (8V,50MA) X2	*	-	T90-C
-	B30-0157-05	LAMP ASSY	*	-	T90-C
-	B30-0158-05	LAMP (8V,0.2A)	*	-	V04-C
-	B30-0159-05	LED	*	Q23 ,24	V02-C
-	B31-0286-05	METER (TUNING/SIGNAL)	*	Q25 ,26	V02-C
-	B31-0287-05	METER (POWER)	*	-	X05-C
-	B46-0062-20	WARRANTY CARD	*	-	X07-C
-	B46-0063-00	WARRANTY CARD	*	-	X11-C
-	B50-3027-00	INST. MANUAL (11GX)	*	-	X13-C
-	B50-3028-00	INST. MANUAL (11000GX)	*	-	X14-C
-	C1	C91-0023-05	CERAMIC 0.01UF 250VAC	-	C25-C
-	C6	C52-1756-16	CERAMIC 560PF K	-	C52-C
-	D15-0171-13	DIAL PULLEY	*	C3 ,4	C71-C
-	D15-0172-04	PULLEY X4	*	C5 ,6	C71-C
-	D20-0142-03	DIAL SHAFT ASSY	*	C7 ,8	C46-C
-	D21-0450-03	TIMER SHAFT	*	C9 ,10	C24-C
-	D22-0033-04	COUPLING	*	C11 ,12	C71-C
-	D32-0082-04	SWITCH STOPPER	*	C13 ,14	C24-C
-	E02-0001-05	TRANSISTOR SOCKET	*	C15 ,16	C24-C
-	E03-0007-05	AC OUTLET	*	C17	C46-C
-	E06-0501-05	DIN CONNECTOR	*	C23 ,24	C46-C
-	E11-0060-15	PHONE JACK	*	C25	C24-C
-	E13-0415-05	PHONO JACK (4P)	*	C26	C24-C
-	E13-0609-05	PHONO JACK (6P)	*	C28	C25-C
-	E14-0107-05	PHONO PLUG (SHORT)	*	C29	C24-C
-	E29-0082-05	ANTENNA TERMINAL	*	C29	C46-C
-	E30-0545-05	POWER CORD (11GX)	*	C30	C24-C
-	E30-0580-05	POWER CORD (11000GX)	*	C31	C24-C
-	G01-0045-24	DIAL SPRING	*	C32	C90-C
-	G01-0360-04	COILED SPRING	*	C37 -40	C54-C
-	G01-0361-04	COILED SPRING (PUSH SW)	*	F1	F05-C
-	G10-0017-04	DUST SHEET	*	F2	F05-C
-	H01-3043-04	CARTON BOX (11GX)	*	-	J13-C
-	H01-3044-04	CARTON BOX (11000GX)	*	L1 ,2	L39-C
-	H10-1519-02	POLYSTYRENE FIXTURE	*	R17	R47-C



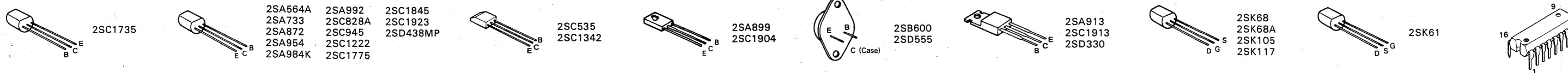
## PARTS LIST

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-	A20-1476-02	FRONT PANEL (11000GX)	*
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-	A33-0051-01	REFLECTOR	
-	A50-0069-03	SIDE PLATE (L)	*
-	A50-0070-03	SIDE PLATE (R)	*
-	A54-0175-12	WOOD FRONT AND TOP BOARD	*
-	B01-0120-03	PANEL ESCUTCHEON	
-	B01-0121-04	PANEL ESCUTCHEON SIDE	
-	B01-0122-04	PANEL ESCUTCHEON SIDE	
-	B04-0069-03	MESH PLATE	
-	B07-0230-14	ESCUTCHEON (SHAFT)	
-	B07-0234-03	ESCUTCHEON (LEVER)	
-	B07-0235-04	ESCUTCHEON (POWER)	
-	B07-0243-04	ESCUTCHEON (PUSH SW)	
-	B07-0244-03	ESCUTCHEON (PUSH SW)	
-	B07-0245-03	ESCUTCHEON (PUSH SW)	
-	B08-0005-04	INDICATOR	
-	B08-0207-14	INDICATOR	
-	B08-3016-04	INDICATOR	
-	B10-0238-03	FRONT GLASS	
-	B20-0422-03	DIAL CALIBRATIONS	
-	B21-0023-14	DIAL POINTER	
-	B30-0077-05	LAMP (8V,50MA) X2	
-	B30-0157-05	LAMP ASSY	
-	B30-0158-05	LAMP (8V,0.2A)	
-	B30-0159-05	LED	
-	B31-0286-05	METER (TUNING/SIGNAL)	
-	B31-0287-05	METER (POWER)	
-	B46-0062-20	WARRANTY CARD	
-	B46-0063-00	WARRANTY CARD	
-	B50-3027-00	INST. MANUAL (11GX)	
-	B50-3028-00	INST. MANUAL (11000GX)	*
C1 ,2	C91-0023-05	CERAMIC 0.01UF 250VAC	
C6	C52-1756-16	CERAMIC 560PF K	
-	D15-0171-13	DIAL PULLEY	
-	D15-0172-04	PULLEY X4	
-	D20-0142-03	DIAL SHAFT ASSY	
-	D21-0450-03	TIMER SHAFT	
-	D22-0033-04	COUPLING	
-	D32-0082-04	SWITCH STOPPER	
-	E02-0001-05	TRANSISTOR SOCKET	
-	E03-0007-05	AC OUTLET	
-	E06-0501-05	DIN CONNECTOR	
-	E11-0060-15	PHONE JACK	
-	E13-0415-05	PHONO JACK (4P)	
-	E13-0609-05	PHONO JACK (6P)	
-	E14-0107-05	PHONO PLUG (SHORT)	
-	E29-0082-05	ANTENNA TERMINAL	
-	E30-0545-05	POWER CORD (11GX)	
-	E30-0580-05	POWER CORD (11000GX)	
-	G01-0045-24	DIAL SPRING	
-	G01-0360-04	COILED SPRING	
-	G01-0361-04	COILED SPRING (PUSH SW)	
-	G10-0017-04	DUST SHEET	
-	H01-3043-04	CARTON BOX (11GX)	*
-	H01-3044-04	CARTON BOX (11000GX)	*
-	H10-1519-02	POLYSTYRENE FIXTURE	

## PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考
-	H20-0449-04	COVER	
-	J02-0104-04	FOOT	
-	J12-0010-04	SHORT PIN	
-	J19-0506-05	PCB HOLDER	
-	J19-0507-05	ANTENNA HOLDER	
-	J19-0524-14	LED HOLDER	
-	J41-0033-05	BUSHING (11GX)	
-	J41-0034-05	BUSHING (11000GX)	
-	K23-0289-04	KNOB (TUNING)	
-	K23-0290-04	KNOB (VOL/BAL/NR MODE)	
-	K23-0303-03	KNOB (MIC)	
-	K23-0307-03	KNOB (TIMER)	
-	K23-0308-04	KNOB (DOLBY)	
-	K27-0070-04	KNOB (LEVER)	
-	K27-0075-04	KNOB (MAC)	
-	K29-0299-04	KNOB (3KEY)	
-	K29-0300-04	KNOB (3KEY,5KEY)	
-	L01-1846-15	POWER TRANSFORMER	*
-	N08-0127-05	DRESSED SCREW (CASE)	
-	N08-0128-35	DRESSED SCREW (GND)	
S1	S59-1041-05	SWITCH (TIMER)	
S2	S33-4014-05	LEVER SWITCH (POWER)	
-	T90-0083-05	AM ANTENNA	
-	T90-0202-05	FM ANTENNA	
Q23 ,24	V04-0555-00	2SD555	
Q25 ,26	V02-0600-00	2SB600	
-	X05-1570-80	TUNER PCB ASSY	*
-	X07-1760-80	POWER AMP PCB ASSY	
-	X11-1480-80	TONE AMP PCB ASSY	
-	X13-2550-80	SPEAKER PCB ASSY	
-	X14-1110-80	DOLBY PCB ASSY	
POWER AMP PCB ASS'Y (X07-1760-80)			
C1 ,2	C25-1433-57	LL-ELEC 3.3UF 25WV	
C3 ,4	C52-1747-16	CERAMIC 470PF K	
C5 ,6	C71-1747-05	CERAMIC 47PF J	
C7 ,8	C46-1747-26	MYLAR 0.0047UF K	
C9 ,10	C24-1010-71	ELECTRO 100UF 10WV	
C11 ,12	C71-1739-05	CERAMIC 390PF J	
C13 ,14	C24-0822-71	ELECTRO 220UF 6.3WV	
C15 ,16	C24-2010-51	ELECTRO 1UF 100WV	
C17	C46-1710-36	MYLAR 0.01UF K	
C23 ,24	C46-2010-47	MYLAR 0.1UF M	
C25	C24-6522-61	ELECTRO 22UF 35WV	
C26	C24-2047-61	ELECTRO 47UF 100WV	
C28	C25-1247-67	LL-ELEC 47UF 16WV	
C29	C24-1047-61	ELECTRO 47UF 10WV	
C29	C46-2010-47	MYLAR 0.1UF M	
C30	C24-1710-51	ELECTRO 1UF 50WV	
C31	C24-1022-81	ELECTRO 2200UF 10WV	
C32	C90-0378-05	ELECTRO 12000UF 71WV	
C37 -40	C54-2710-39	CERAMIC 0.01UF P	
F1	F05-7025-05	FUSE (7A)	
F2	F05-3523-05	FUSE (3.5A)	
-	J13-0041-05	FUSE HOLDER	
L1 ,2	L39-0080-15	COIL	
R17	R47-5433-25	FL-PROOF RS3.3K J 3A	

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考
R18	R43-1256-05	FL-PROOF RD56 J 2E	
R23 ,24	R43-1268-05	FL-PROOF RD68 J 2E	
R25 -28	R43-1210-15	FL-PROOF RD100 J 2E	
R29 ,30	R40-8382-26	RC 8.2K K 2H	
R31 -34	R43-1227-05	FL-PROOF RD27 J 2E	
R37 ,38	R43-1222-15	FL-PROOF RD220 J 2E	
R47 -50	R43-1233-15	FL-PROOF RD330 J 2E	
R51 -54	R43-1247-95	FL-PROOF RD4.7 J 2E	
R55 -58	R92-0167-05	CEMENT 0.22 J 3F	
R69 ,70	R47-5410-05	FL-PROOF RS10 J 3A	
R71 ,72	R47-5610-05	FL-PROOF RS10 J 3F	
R79	R47-5610-25	FL-PROOF RS1K J 3F	
VR1 ,2	R12-0052-05	TRIMMING POT 100(B)BIAS	
RL1	S51-2038-05	RELAY	
S1	S31-2046-05	SLIDE SWITCH	
D1 ,2	V11-5100-40	STV-4H(G)	
D3 ,4	V11-0271-05	1S2076	
D5 ,6	V11-0273-05	1S2076A	
D7 ,8	V11-0271-05	1S2076	
D9 ,10	V11-4161-06	WZ-044	
D19	V11-4100-20	WZ-300	
D20	V11-0295-05	W06B	
D21	V11-0271-05	1S2076	
D22	V11-0295-05	W06B	
D26	V11-2100-80	M4C-51-13*2	
Q1 -4	V01-0992-10	2SA992(F,E)	
Q5 ,6	V01-0199-05	2SA899(B,V)	
Q7 -10	V03-0460-05	2SC1904(B,V)	
Q15 ,16	V03-1845-10	2SC1845(F,E)	
Q17	V01-0992-10	2SA992(F,E)	
Q19 ,20	V03-0468-05	2SC1913(Q,R)	
Q21 ,22	V01-0188-05	2SA913(Q,R)	
Q31	V01-0564-30	2SA564A(Q,R) OR	
Q31	V01-0733-30	2SA733(A)(R,Q)	
Q32 ,33	V03-0270-05	2SC945(R,Q) OR	
Q32 ,33	V03-0345-05	2SC828A(Q,R)	
Q34	V03-1735-10	2SC1735(E) OR	
Q34	V04-0438-30	2SD438MP	
Q35	V03-1845-10	2SC1845(F,E)	

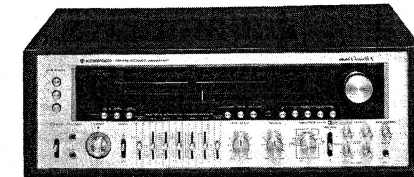




# RECEIVER

(KR-11000GX)

# MODEL ELEVEN GX



## POWER AMPLIFIER SECTION

### Power Output

120 watts per channel minimum RMS, both channels driven, at 8 ohms from 20 to 20,000 Hz with no more than 0.03% total harmonic distortion.

Both Channels Driven	130 + 130W 40 at 1 kHz
Dynamic Power Output	440W 40
Total Harmonic Distortion	0.03% at rated power into 8Ω
	0.01% at 1/2 rated power into 8Ω
Intermodulation Distortion	0.03% at rated power into 8Ω
(60 Hz : 7 kHz = 4 : 1)	0.01% at 1/2 rated power into 8Ω
Power Bandwidth	5 Hz to 70,000 Hz
Frequency Response	5 Hz to 100,000 Hz - 1.5 dB
Signal to Noise Ratio	115 dB (short circuited)
Damping Factor	60 at 8 ohms
Input Sensitivity/Impedance	1.0V/40 kΩ
Speaker Impedance	Accept 40 to 160

## PRE AMPLIFIER SECTION

### Input Sensitivity/Impedance/Signal to Noise Ratio (IHF A curve)

Phono 1	2.5 mV/50 kΩ/80 dB
Phono 2	2.5 mV/50 kΩ/80 dB
AUX	150 mV/50 kΩ/110 dB
Tape A, B	150 mV/50 kΩ/110 dB
Mic	1.5 mV/10 kΩ/70 dB
Maximum Input Level for Phono	250 mV (RMS), T.H.D. 0.03% at 1 kHz

### Frequency Response

Phono	RIAA standard 30 Hz to 20 kHz ±0.3 dB
AUX and Tape	10 Hz to 60,000 Hz - 1.0 dB

### Multiple Acoustic Compensator

63 Hz	±10 dB at 63 Hz
250 Hz	±10 dB at 250 Hz
1 kHz	±10 dB at 1 kHz
4 kHz	±10 dB at 4 kHz
16 kHz	±10 dB at 16 kHz
Loudness Control (-30 dB Vol.)	+10 dB at 100 Hz

### Variable Frequency Filters

Low Filter	12 dB/oct. (18 Hz to 200 Hz)
High Filter	12 dB/oct. (3 kHz to 20 kHz)

### Output Level/Impedance

Tape REC (Pin)	A: 150 mV/100Ω
	B: 150 mV/100Ω
(DIN)	B: 120 mV/80 kΩ
Pre Out	1.0V/1 kΩ

## FM TUNER SECTION

Usable Sensitivity	10.3 dBf (1.8 μV)
50 dB Quieting Sensitivity	
Mono	14.7 dBf (3.0 μV)
Stereo	37.2 dBf (40 μV)
Signal to Noise Ratio at 65 dBf	
Mono	80 dB
Stereo	74 dB
Total Harmonic Distortion at 65 dBf	
Mono	0.1% at 1 kHz
Stereo	0.15% at 1 kHz
Frequency Response	30 Hz to 15,000 Hz + 0.5 - 1.0 dB

Capture Ratio	1.0 dB
Alternate Channel Selectivity	75 dB
Spurious Response Ratio	85 dB
Image Response Ratio	60 dB
IF Response Ratio	75 dB

AM Suppression Ratio at 65 dBf	65 dB
Stereo Separation	48 dB at 1,000 Hz
	35 dB at 50 Hz to 15,000 Hz

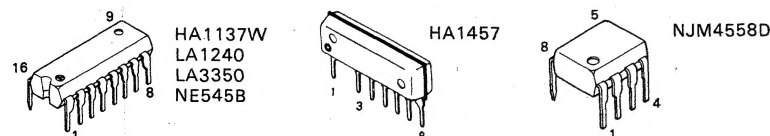
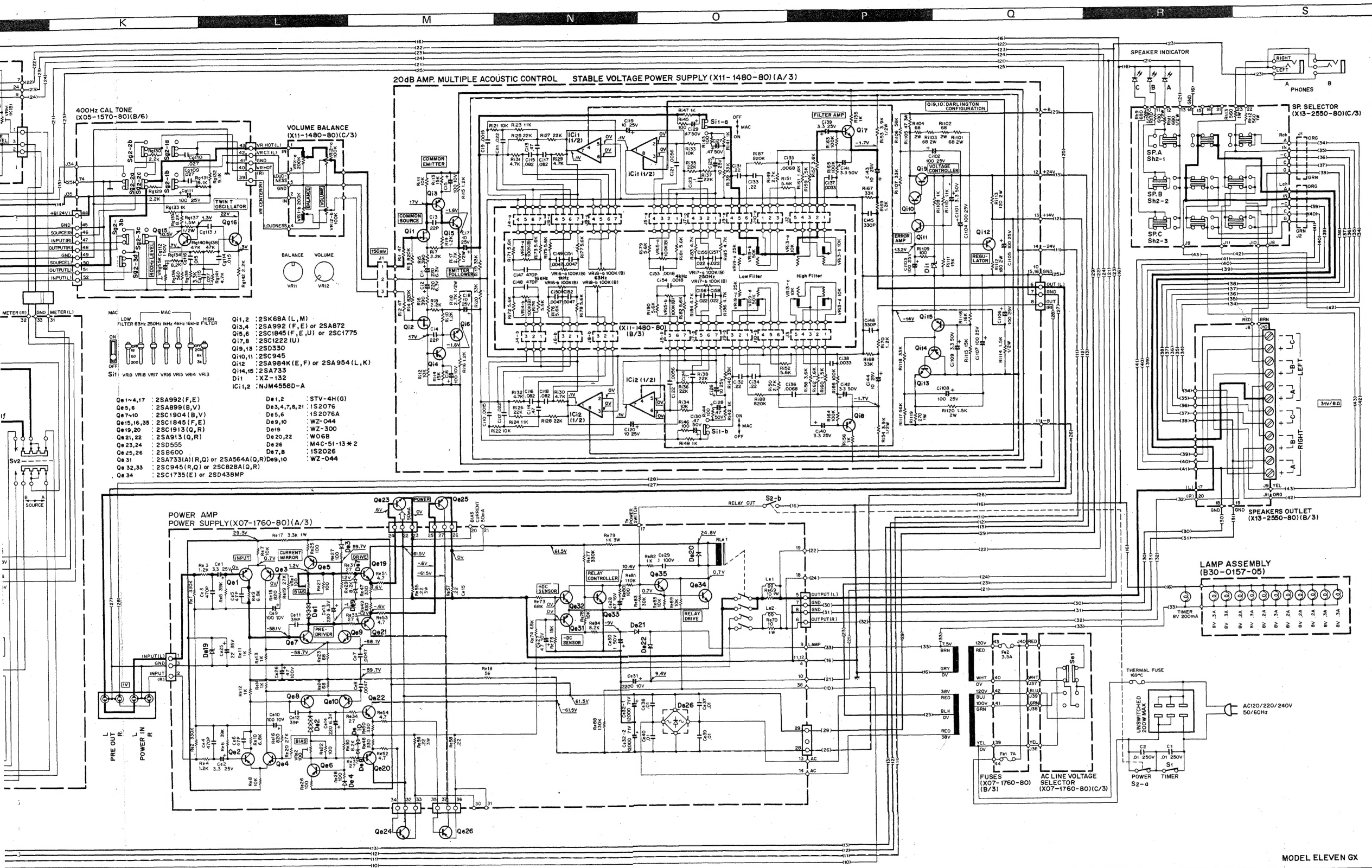
Sub Carrier Product Rejection	46 dB
Antenna Impedance	300Ω (balanced and 75Ω unbalanced)
FM Frequency Range	88 MHz to 108 MHz

AM TUNER SECTION	
Usable Sensitivity	20 μV
Signal to Noise Ratio	50 dB
Image Rejection	55 dB
Selectivity	30 dB
IF Rejection	30 dB
Total Harmonic Distortion	0.5%

GENERAL	
Power Requirement	50/60 Hz 110-120/220-240V
Power Consumption	600 watts at full power
A.C. Outlet	Switched 2, Unswitched 1

Dimensions	W 24-9/16" (624 mm)
	H 8-1/8" (206 mm)
	D 18-1/8" (460 mm)
Weight (Net)	47.1 lb (20.5 kg)
(Gross)	57.0 lb (24.8 kg)

Note: Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.



DC voltage measured with 20 kΩ/V VOM under no signal.



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-	A33-0051-01	REFLECTOR	
-	A50-0069-03	SIDE PLATE (L)	
③ C1 ,2	C25-1453-57	LL-ELEC 3.3UF 25WV	
C3 ,4	C52-1747-16	CERAMIC 470PF K	
C5 ,6	C71-1747-05	CERAMIC 47PF J	
C7 ,8	C46-1747-26	MYLAR 0.0047UF K	
C9 ,10	C24-1010-71	ELECTRO 100UF 10WV	
C11 ,12	C71-1739-05	CERAMIC 390PF J	
C13 ,14	C24-0822-71	ELECTRO 220UF 6.3WV	
C15 ,16	C24-2010-51	ELECTRO 1UF 100WV	
C17	C46-1710-36	MYLAR 0.01UF K	
C23 ,24	C46-2010-47	MYLAR 0.1UF M	

### NOTE:

MODEL 9GX (KR-9000GX) Service Manual had wrong parts No, when reordering, you type the correct parts No. B51-0623-00.

- ① Symbol of new parts  
② Parts list of Model ELEVEN GX and KR-1100GX was included in this manual.

In column of parts list, 11GX means model ELEVEN GX (U, M type), 1100GX does KR-1100GX (H type). Part list of TUNER, TONE, SPEAKER SELECT and DOLBY PCB ass'y is not written, refer to the MODEL 11G service manual.  
(Parts No. B51-0530-00)

- ③ Reference No. in schematic diagram.  
④ Abbreviation of "ceramic capacitor"  
All capacitors and resistors are listed using abbreviations.  
⑤ Abbreviations

\* Abbreviations of capacitors (Parts No. with initial letter "C").

ELECTRO	Electrolytic capacitor
LL-ELEC	Low leak electrolytic capacitor
NP-ELEC	Non-pole electrolytic capacitor
MICA	Mica capacitor
POLYSTY	Polystyrene capacitor
MYLAR	Mylar capacitor
CERAMIC	Ceramic capacitor
TANTAL	Tantalum capacitor
MF	Metallized film capacitor
OIL	Oil capacitor

The unit "UF" is used in lieu of "μF"

\* Abbreviations of resistors (Parts No. with initial letters "R").

RC	Carbon composition resistor
RD	Carbon film resistor
FL-PROOF RD	Flame-proof carbon film resistor
RW	Wire wound power resistor
FL-PROOF RS	Flame-proof metal oxide film resistor
RN	Metal film resistor
2B	Rated wattage 1/8W
2E	Rated wattage 1/4W
2H	Rated wattage 1/2W
3A	Rated wattage 1W
3D	Rated wattage 2W
3F	Rated wattage 3W
3G	Rated wattage 4W
3H	Rated wattage 5W

All resistor values are indicated with the unit (Ω) omitted.

\* Abbreviations common to capacitors and resistors.

C	±0.25pF (Used for capacitors only)
D	±0.5pF (Used for capacitors only)
F	±1%
G	±2%
J	±5%
K	±10%
M	±20%
Z	+80%, -20% (Used for capacitors only)
P	+100%, -0% (Used for capacitors only)

- ⑥ Resistors RD (carbon composition resistors) are not listed in the parts list. For values, refer to the schematic diagram.